



## SEQUENCE LISTING

<110> Polterman, et al.  
Amylin Pharmaceuticals, Inc.

<120> USE OF EXENDINS AND AGONISTS THEREOF FOR  
MODULATION OF TRIGLYCERIDE LEVELS AND TREATMENT OF  
DYSLIPIDEMIA

<130> 030639.0027.UTL(249/124)

<140> 09/756,690

<141> 2001-01-09

<150> 60/175,365

<151> 2000-01-10

<160> 190

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 39

<212> PRT

<213> Heloderma horridum

<220>

<223> Exendin-3

<220>

<221> AMIDATION

<222> 39

<223> Xaa stands for serine

<400> 1

His Ser Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
20 25 30

Ser Gly Ala Pro Pro Pro Xaa  
35

<210> 2

<211> 39

<212> PRT

<213> Heloderma suspectum

<220>

<223> Exendin-4

<220>

<221> AMIDATION

<222> 39  
<223> Xaa stands for serine

<400> 2  
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
20 25 30  
Ser Gly Ala Pro Pro Pro Xaa  
35

<210> 3  
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<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> VARIANT  
<222> (1)  
<223> Xaa stands for His, Arg or Tyr

<220>  
<221> VARIANT  
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<223> Xaa stands for Ser, Gly, Ala or Thr

<220>  
<221> VARIANT  
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<223> Xaa stands Asp or Glu

<220>  
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<223> Xaa stands for Phe, Tyr or naphthylalanine

<220>  
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<223> Xaa stands for Thr or Ser

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<223> Xaa stands for Asp or Glu

<220>  
<221> VARIANT

<222> (10)  
 <223> Xaa stands for Leu, Ile, Val, pentylglycine or Met  
  
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 <223> Xaa stands for Leu, Ile, pentylglycine, Val or Met  
  
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 <223> Xaa stands for Phe, Tyr or naphthylalanine  
  
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 <223> Xaa stands for Ile, Val, Leu, pentylglycine, tert-butylglycine or Met  
  
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 <222> (24)  
 <223> Xaa stands for Glu or Asp  
  
 <220>  
 <221> VARIANT  
 <222> (25)  
 <223> Xaa stands for Trp, Phe, Tyr, or naphthylalanine  
  
 <220>  
 <221> VARIANT  
 <222> (31, 36, 37 and 38)  
 <223> Xaa is independently Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine, N-alkylpentylglycine, or N-alkylalanine  
  
 <220>  
 <221> UNSURE  
 <222> (39)  
 <223> Xaa stands for stands for Ser, Thr or Tyr, which is optionally amidated and with the proviso that the compound is not exendin-3 or exendin-4  
  
  
 <400> 3  
 Xaa Xaa Xaa Gly Thr Xaa Xaa Xaa Xaa Xaa Ser Lys Gln Xaa Glu Glu  
   1                  5                  10                  15  
 Glu Ala Val Arg Leu Xaa Xaa Xaa Xaa Leu Lys Asn Gly Gly Xaa Ser  
           20                  25                  30  
 Ser Gly Ala Xaa Xaa Xaa Xaa  
           35  
  
  
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<223> Exendin Agonist

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<223> Xaa stands for Ser, Gly, Ala or Thr

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<223> Xaa stands for Asp or Glu

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<223> Xaa stands for Ala or Thr

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<222> (6)  
<223> Xaa stands for Ala, Phe, Tyr or naphthylalanine

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<220>  
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<223> Xaa stands for Ala or Lys

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<223> Xaa stands for Ala or Arg

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<223> Xaa stands for Ala, Phe, Tyr or naphthylalanine

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<223> Xaa stands for Ile, Val, Leu, pentylglycine, tert-butylglycine or Met

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 <223> Xaa stands for Ala or Leu

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 <223> Xaa stands for Ala or Lys

<220>  
 <221> VARIANT  
 <222> (28)  
 <223> Xaa stands for Ala or Asn, which is optionally amidated

<400> 4  
 Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
   1                  5                  10                  15  
 Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
                   20                  25

<210> 5  
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<220>  
 <223> Exendin Agonist

<220>  
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 <223> Xaa stands for His, Arg, Tyr, Ala, Norval, Val or Norleu

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 <223> Xaa stands for Ser, Gly Ala or Thr

<220>  
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 <222> (3)  
 <223> Xaa stands for Ala, Asp or Glu

<220>  
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 <222> (4)  
 <223> Xaa stands for Ala Norval, Val, Norleu or Gly

<220>  
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 <223> Xaa stands for Ala or Thr

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 <223> Xaa stands for Phe, Tyr or naphthylalanine  
  
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 <223> Xaa stands for Ile, Val, Leu, pentylglycine, tert-butylglycine or Met  
  
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 <223> Xaa stands for Ala or Leu  
  
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<222> (28)

<223> Xaa stands for Ala or Asn, which is optionally amidated

<400> 5

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa

1

5

10

15

Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa

20

25

<210> 6

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<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<400> 6

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu

1

5

10

15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly

20

25

30

<210> 7

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<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (30)

<223> Xaa stands for Glycine

<400> 7

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu

1

5

10

15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Xaa

20

25

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<210> 8

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<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (28)

<223> Xaa stands for Asparagine

<400> 8

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Ala Ile Glu Phe Leu Lys Xaa  
20 25

<210> 9

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (39)

<223> Xaa stands for Serine

<400> 9

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser  
20 25 30  
Ser Gly Ala Pro Pro Pro Xaa  
35

<210> 10

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (39)

<223> Xaa stands for Serine

<400> 10

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
20 25 30  
Ser Gly Ala Pro Pro Pro Xaa  
35

<210> 11

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<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (39)

<223> Xaa stands for Serine

<400> 11

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15  
Glu Ala Val Arg Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser Ser  
20 25 30  
Gly Ala Pro Pro Pro Xaa  
35

<210> 12

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<220>

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<220>

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<222> (39)

<223> Xaa stands for Serine

<400> 12

Tyr Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
20 25 30  
Ser Gly Ala Pro Pro Pro Xaa  
35

<210> 13

<211> 39

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<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (39)

<223> Xaa stands for Tyrosine

<400> 13

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
                   20                  25                  30  
 Ser Gly Ala Pro Pro Pro Xaa  
                   35

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<220>  
 <223> Exendin Agonist

<220>  
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 <222> (39)  
 <223> Xaa stands for Serine

<400> 14  
 His Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
   1                  5                  10                  15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
                   20                  25                  30  
 Ser Gly Ala Pro Pro Pro Xaa  
                   35

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<220>  
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 <223> Xaa stands for naph

<220>  
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 <223> Xaa stands for Serine

<400> 15  
 His Gly Glu Gly Thr Xaa Thr Ser Asp Leu Ser Asp Leu Ser Lys Gln  
   1                  5                  10                  15  
 Met Glu Glu Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly  
                   20                  25                  30  
 Gly Pro Ser Ser Gly Ala Pro Pro Pro Xaa  
                   35                  40

<210> 16  
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<220>

<221> AMIDATION

<222> (39)

<223> Xaa stands for Serine

<400> 16

His Gly Glu Gly Thr Phe Ser Ser Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
20 25 30  
Ser Gly Ala Pro Pro Pro Xaa  
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<210> 17

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<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (39)

<223> Xaa stands for Serine

<400> 17

His Gly Glu Gly Thr Phe Ser Thr Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
20 25 30  
Ser Gly Ala Pro Pro Pro Xaa  
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<220>

<223> Exendin Agonist

<220>

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<222> (39)

<223> Xaa stands for Serine

<400> 18

His Gly Glu Gly Thr Phe Thr Thr Asp Leu Ser Lys Gln Met Glu Glu  
 1 5 10 15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
 20 25 30  
 Ser Gly Ala Pro Pro Pro Xaa  
 35

<210> 19  
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<400> 19  
 His Gly Glu Gly Thr Phe Thr Ser Glu Leu Ser Lys Gln Met Glu Glu  
 1 5 10 15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
 20 25 30  
 Ser Gly Ala Pro Pro Pro Xaa  
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<210> 20  
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 <222> (39)  
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<400> 20  
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 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
                   20                  25                  30  
 Ser Gly Ala Pro Pro Pro Xaa  
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 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser  
                   20                  25                  30  
 Ser Gly Ala Pro Pro Pro Xaa  
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<400> 22  
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Xaa Glu Glu  
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Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
                   20                  25                  30  
 Ser Gly Ala Pro Pro Pro Xaa  
                   35

<210> 23  
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<400> 23  
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 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser  
                   20                  25                  30  
 Ser Gly Ala Pro Pro Pro Xaa  
                   35

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 <223> Xaa stands for Serine

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 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
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Glu Ala Val Arg Leu Xaa Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
 20 25 30  
 Ser Gly Ala Pro Pro Pro Xaa  
 35

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 <222> (39)  
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<400> 25  
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
 1 5 10 15  
 Glu Ala Val Arg Leu Phe Val Glu Trp Leu Lys Asn Gly Gly Pro Ser  
 20 25 30  
 Ser Gly Ala Pro Pro Pro Xaa  
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<400> 26  
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
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 Glu Ala Val Arg Leu Phe Val Glu Phe Leu Lys Asn Gly Gly Pro Ser  
 20 25 30  
 Ser Gly Ala Pro Pro Pro Xaa  
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<400> 27  
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
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 Glu Ala Val Arg Leu Phe Xaa Glu Trp Leu Lys Asn Gly Gly Pro Ser  
 20 25 30  
 Ser Gly Ala Pro Pro Pro Xaa  
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<400> 28  
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 Glu Ala Val Arg Leu Phe Xaa Glu Phe Leu Lys Asn Gly Gly Pro Ser  
 20 25 30  
 Ser Gly Ala Pro Pro Pro Xaa  
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Glu Ala Val Arg Leu Phe Ile Asp Trp Leu Lys Asn Gly Gly Pro Ser  
20 25 30  
Ser Gly Ala Pro Pro Pro Xaa  
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His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
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20 25 30  
Ser Gly Ala Pro Pro Pro Xaa  
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<223> Exendin Agonist

<220>  
<221> VARIANT  
<222> (31, 36, 37 and 38)  
<223> Xaa stands for tPro

<220>  
<221> AMIDATION  
<222> (39)  
<223> Xaa stands for Serine

<400> 31  
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser  
 20 25 30  
 Ser Gly Ala Xaa Xaa Xaa Xaa  
 35

<210> 32  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
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 <222> (36,37 and 38)  
 <223> Xaa stands for tPro

<220>  
 <221> AMIDATION  
 <222> (39)  
 <223> Xaa stands for Serine

<400> 32  
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
 1 5 10 15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
 20 25 30  
 Ser Gly Ala Xaa Xaa Xaa Xaa  
 35

<210> 33  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> VARIANT  
 <222> (31, 36, 37 and 38)  
 <223> Xaa stands for hPro

<220>  
 <221> AMIDATION  
 <222> (39)  
 <223> Xaa stands for Serine

<400> 33  
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser  
                   20                  25                  30  
 Ser Gly Ala Xaa Xaa Xaa Xaa  
                   35

<210> 34  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>  
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<220>  
 <221> VARIANT  
 <222> (36,37 and 38)  
 <223> Xaa stands for hPro

<220>  
 <221> AMIDATION  
 <222> (39)  
 <223> Xaa stands for Serine

<400> 34  
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
   1                  5                  10                  15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
                   20                  25                  30  
 Ser Gly Ala Xaa Xaa Xaa Xaa  
                   35

<210> 35  
 <211> 39  
 <212> PRT  
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<220>  
 <223> Exendin Agonist

<220>  
 <221> VARIANT  
 <222> (31, 36, 37 and 38)  
 <223> Xaa stands for tPro

<220>  
 <221> AMIDATION  
 <222> (39)  
 <223> Xaa stands for Serine

<400> 35  
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
   1                  5                  10                  15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Xaa Ser  
                   20                  25                  30  
 Ser Gly Ala Xaa Xaa Xaa Xaa  
                   35

<210> 36  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> VARIANT  
 <222> (31, 36, 37 and 38)  
 <223> Xaa stands for hPro

<220>  
 <221> AMIDATION  
 <222> (39)  
 <223> Xaa stands for Serine

<400> 36  
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
   1                  5                  10                  15  
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Xaa Ser  
                   20                  25                  30  
 Ser Gly Ala Xaa Xaa Xaa Xaa  
                   35

<210> 37  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> VARIANT  
 <222> (31, 36, 37 and 38)  
 <223> Xaa stands for MeAla

<220>  
 <221> AMIDATION  
 <222> (39)  
 <223> Xaa stands for Serine

<400> 37  
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
   1                  5                  10                  15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser  
                   20                  25                  30  
 Ser Gly Ala Xaa Xaa Xaa Xaa  
                   35

<210> 38  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> VARIANT  
 <222> (36, 37 and 38)  
 <223> Xaa stands for MeAla

<220>  
 <221> AMIDATION  
 <222> (39)  
 <223> Xaa stands for Serine

<400> 38  
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
   1                  5                  10                  15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
                   20                  25                  30  
 Ser Gly Ala Xaa Xaa Xaa Xaa  
                   35

<210> 39  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> VARIANT  
 <222> (31, 36, 37 and 38)  
 <223> Xaa stands for MeAla

<220>  
 <221> AMIDATION  
 <222> (39)  
 <223> Xaa stands for Serine

<400> 39  
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
   1                  5                  10                  15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Xaa Ser  
                   20                  25                  30  
 Ser Gly Ala Xaa Xaa Xaa Xaa  
                   35

<210> 40  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

<400> 40  
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
   1                  5                  10                  15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Xaa  
                   20                  25

<210> 41  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

<400> 41  
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
   1                  5                  10                  15  
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Xaa  
                   20                  25

<210> 42  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (28)



<223> Xaa stands for Asparagine

<400> 42

His	Ala	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10					15		
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Xaa				
			20				25								

<210> 43

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (28)

<223> Xaa stands for Asparagine

<400> 43

His	Gly	Glu	Gly	Ala	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10					15		
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Xaa				
			20				25								

<210> 44

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (28)

<223> Xaa stands for Asparagine

<400> 44

His	Gly	Glu	Gly	Thr	Ala	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10					15		
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Xaa				
			20				25								

<210> 45

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 45  
His Gly Glu Gly Thr Phe Thr Ala Asp Leu Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Xaa  
20 25

<210> 46  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 46  
His Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Xaa  
20 25

<210> 47  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 47  
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ala Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Xaa  
20 25

<210> 48  
<211> 28

<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 48  
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Ala Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Xaa  
20 25

<210> 49  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 49  
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Ala Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Xaa  
20 25

<210> 50  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 50  
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Ala Glu Glu

15

<220>  
<223> Exendin Agonist

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<400> 51
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Ala Glu
 1          5          10          15
Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Xaa
      20          25

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<220>  
<223> Exendin Agonist

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<400> 52
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Ala
 1          5          10          15
Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Xaa
      20          25

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<220>  
<223> Exendin Agonist

28

<222> (28)  
<223> Xaa stands for Asparagine

<400> 53  
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Ala Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Xaa  
20 25

<210> 54  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 54  
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Ala Arg Leu Phe Ile Glu Phe Leu Lys Xaa  
20 25

<210> 55  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 55  
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Ala Leu Phe Ile Glu Phe Leu Lys Xaa  
20 25

<210> 56  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 56  
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Ala Phe Ile Glu Phe Leu Lys Xaa  
20 25

<210> 57  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 57  
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Ala Phe Leu Lys Xaa  
20 25

<210> 58  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 58  
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Ala Leu Lys Xaa  
20 25

<210> 59  
<211> 28

<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 59  
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Phe Ala Lys Xaa  
20 25

<210> 60  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 60  
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Ala Xaa  
20 25

<210> 61  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Alanine

<400> 61  
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu





<220>  
 <221> AMIDATION  
 <222> (37)  
 <223> Xaa stands for Proline

<400> 64  
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
 1 5 10 15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
 20 25 30  
 Ser Gly Ala Pro Xaa  
 35

<210> 65  
 <211> 37  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (37)  
 <223> Xaa stands for Proline

<400> 65  
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
 1 5 10 15  
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser  
 20 25 30  
 Ser Gly Ala Pro Xaa  
 35

<210> 66  
 <211> 36  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (36)  
 <223> Xaa stands for Proline

<400> 66  
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu

1                      5                      10                      15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
                     20                      25                      30  
 Ser Gly Ala Xaa  
                     35

<210> 67  
 <211> 36  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (36)  
 <223> Xaa stands for Proline

<400> 67  
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
 1                      5                      10                      15  
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser  
                     20                      25                      30  
 Ser Gly Ala Xaa  
                     35

<210> 68  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (35)  
 <223> Xaa stands for Alanine

<400> 68  
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
 1                      5                      10                      15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
                     20                      25                      30  
 Ser Gly Xaa  
                     35

<210> 69  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (35)

<223> Xaa stands for Alanine

<400> 69

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10					15		
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20				25					30			
Ser	Gly	Xaa													
		35													

<210> 70

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (34)

<223> Xaa stands for Glycine

<400> 70

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5				10					15		
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20				25					30			
Ser	Xaa														

<210> 71

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (34)

<223> Xaa stands for Glycine

<400> 71

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

1	5	10	15
Glu Ala Val	Arg Leu Phe Ile Glu Phe	Leu Lys Asn Gly Gly	Pro Ser
	20	25	30

Ser Xaa

<210> 72  
 <211> 33  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (33)  
 <223> Xaa stands for Serine

<400> 72
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Xaa

<210> 73  
 <211> 33  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (33)  
 <223> Xaa stands for Serine

<400> 73
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15
Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

Xaa

<210> 74  
 <211> 32  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>

<221> AMIDATION

<222> (32)

<223> Xaa stands for Serine

<400> 74

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Xaa
			20					25					30		

<210> 75

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (32)

<223> Xaa stands for Serine

<400> 75

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Xaa
			20					25					30		

<210> 76

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (31)

<223> Xaa stands for Proline

<400> 76

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Xaa	
			20					25					30		

<210> 77

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (31)

<223> Xaa stands for Proline

<400> 77

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10					15		
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Xaa	
			20					25					30		

<210> 78

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (30)

<223> Xaa stands for Glycine

<400> 78

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10					15		
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Xaa		
			20					25					30		

<210> 79

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (29)

<223> Xaa stands for Glycine

<400> 79

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5				10					15		
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Xaa			
			20					25							

<210> 80

<211> 29

<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (29)  
<223> Xaa stands for Glycine

<400> 80  
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Xaa  
20 25

<210> 81  
<211> 38  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> VARIANT  
<222> (31, 36 & 37)  
<223> Xaa stands for tPro

<220>  
<221> AMIDATION  
<222> (38)  
<223> Xaa stands for tPro

<400> 81  
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser  
20 25 30  
Ser Gly Ala Xaa Xaa Xaa  
35

<210> 82  
<211> 38  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> VARIANT  
<222> (36 & 37)  
<223> Xaa stands for tPro

<220>

<221> AMIDATION

<222> (38)

<223> Xaa stands for tPro

<400> 82

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5				10					15		
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20				25					30			
Ser	Gly	Ala	Xaa	Xaa	Xaa										
			35												

<210> 83

<211> 37

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> VARIANT

<222> (31)

<223> Xaa stands for NMeala

<220>

<221> AMIDATION

<222> (37)

<223> Xaa stands for Proline

<400> 83

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5				10					15		
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Xaa	Ser
			20				25					30			
Ser	Gly	Ala	Pro	Xaa											
			35												

<210> 84

<211> 37

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> VARIANT

<222> (31 & 36)

<223> Xaa stands for NMeala

<220>

<221> AMIDATION



<222> (37)  
<223> Xaa stands for NMeala

<400> 84  
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser  
20 25 30  
Ser Gly Ala Xaa Xaa  
35

<210> 85  
<211> 37  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> VARIANT  
<222> (31 & 36)  
<223> Xaa stands for hPro

<220>  
<221> AMIDATION  
<222> (37)  
<223> Xaa stands for hPro

<400> 85  
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser  
20 25 30  
Ser Gly Ala Xaa Xaa  
35

<210> 86  
<211> 36  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> VARIANT  
<222> (31)  
<223> Xaa stands for hPro

<220>  
<221> AMIDATION

<222> (36)  
<223> Xaa stands for hPro

<400> 86  
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser  
20 25 30  
Ser Gly Ala Xaa  
35

<210> 87  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (35)  
<223> Xaa stands for Alanine

<400> 87  
Arg Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
20 25 30  
Ser Gly Xaa  
35

<210> 88  
<211> 30  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (30)  
<223> Xaa stands for Glycine

<400> 88  
His Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Xaa  
20 25 30

<210> 89  
<211> 28

<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> VARIANT  
<222> (6)  
<223> Xaa stands for Naphthylala

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 89  
His Gly Glu Gly Thr Xaa Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Xaa  
20 25

<210> 90  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 90  
His Gly Glu Gly Thr Phe Ser Ser Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Xaa  
20 25

<210> 91  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 91

His Gly Glu Gly Thr Phe Ser Thr Asp Leu Ser Lys Gln Met Glu Glu  
 1 5 10 15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Xaa  
 20 25

<210> 92  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

<400> 92  
 His Gly Glu Gly Thr Phe Thr Ser Glu Leu Ser Lys Gln Met Ala Glu  
 1 5 10 15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Xaa  
 20 25

<210> 93  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> VARIANT  
 <222> (10)  
 <223> Xaa stands for pentylgly

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

<400> 93  
 His Gly Glu Gly Thr Phe Thr Ser Asp Xaa Ser Lys Gln Leu Glu Glu  
 1 5 10 15  
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Xaa  
 20 25

<210> 94  
 <211> 28  
 <212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> VARIANT

<222> (22)

<223> Xaa stands for Naphthylala

<220>

<221> AMIDATION

<222> (28)

<223> Xaa stands for Asparagine

<400> 94

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10					15		
Glu	Ala	Val	Arg	Leu	Xaa	Ile	Glu	Phe	Leu	Lys	Xaa				
			20				25								

<210> 95

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> VARIANT

<222> (23)

<223> Xaa stands for tButylgly

<220>

<221> AMIDATION

<222> (28)

<223> Xaa stands for Asparagine

<400> 95

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5				10					15		
Glu	Ala	Val	Arg	Leu	Phe	Xaa	Glu	Trp	Leu	Lys	Xaa				
			20				25								

<210> 96

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (28)

<223> Xaa stands for Asparagine

<400> 96

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10						15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Asp	Phe	Leu	Lys	Xaa				
			20				25								

<210> 97

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (33)

<223> Xaa stands for Serine

<400> 97

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Ala	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10						15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20				25					30			
Xaa															

<210> 98

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (29)

<223> Xaa stands for Glycine

<400> 98

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Ala	Ser	Lys	Gln	Met	Glu	Glu
1				5				10						15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Xaa			
			20				25								

<210> 99

<211> 37

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>  
 <221> VARIANT  
 <222> (31 & 36)  
 <223> Xaa stands for hPro

<220>  
 <221> AMIDATION  
 <222> (37)  
 <223> Xaa stands for hPro

<400> 99  
 His Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Met Glu Glu  
 1 5 10 15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser  
 20 25 30  
 Ser Gly Ala Xaa Xaa  
 35

<210> 100  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist  
 <220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

<400> 100  
 Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
 1 5 10 15  
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Xaa  
 20 25

<210> 101  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

<400> 101  
 His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Xaa  
20 25

<210> 102  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 102  
His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Xaa  
20 25

<210> 103  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 103  
His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Xaa  
20 25

<210> 104  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine



<400> 104  
 Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
   1                  5                  10                  15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Xaa  
                   20                  25

<210> 105  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

<400> 105  
 His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
   1                  5                  10                  15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Xaa  
                   20                  25

<210> 106  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

<400> 106  
 His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
   1                  5                  10                  15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Xaa  
                   20                  25

<210> 107  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

<400> 107  
 His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu  
 1 5 10 15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Xaa  
 20 25

<210> 108  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

<400> 108  
 His Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Met Glu Glu  
 1 5 10 15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Xaa  
 20 25

<210> 109  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

<400> 109  
 Ala Ala Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
 1 5 10 15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Xaa  
 20 25

<210> 110  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 110  
Ala Ala Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Xaa  
20 25

<210> 111  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 111  
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Xaa  
20 25

<210> 112  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 112  
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu

1	5	10	15								
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Xaa
				20					25		

<210> 113  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

<400> 113
Ala Gly Asp Gly Ala Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Xaa
20 25

<210> 114  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

<400> 114
Ala Gly Asp Gly Ala Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15
Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Xaa
20 25

<210> 115  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> VARIANT  
 <222> (6)  
 <223> Xaa stands for NaphthylAla

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

<400> 115  
 Ala Gly Asp Gly Thr Xaa Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
 1 5 10 15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Xaa  
 20 25

<210> 116  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> VARIANT  
 <222> (6)  
 <223> Xaa stands for Naphthylala

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

<400> 116  
 Ala Gly Asp Gly Thr Xaa Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
 1 5 10 15  
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Xaa  
 20 25

<210> 117  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

<400> 117  
 Ala Gly Asp Gly Thr Phe Ser Ser Asp Leu Ser Lys Gln Met Glu Glu  
 1 5 10 15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Xaa  
 20 25

<210> 118  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 118  
Ala Gly Asp Gly Thr Phe Ser Ser Asp Leu Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Xaa  
20 25

<210> 119  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 119  
Ala Gly Asp Gly Thr Phe Thr Ala Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Xaa  
20 25

<210> 120  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 120  
Ala Gly Asp Gly Thr Phe Thr Ala Asp Leu Ser Lys Gln Leu Glu Glu

1	5	10	15								
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Xaa
			20					25			

<210> 121  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

<400> 121
Ala Gly Asp Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu
1 5 10 15
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Xaa
20 25

<210> 122  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

<400> 122
Ala Gly Asp Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Leu Glu Glu
1 5 10 15
Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Xaa
20 25

<210> 123  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

<400> 123  
 Ala Gly Asp Gly Thr Phe Thr Ser Glu Leu Ser Lys Gln Met Glu Glu  
   1                  5                  10                  15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Xaa  
                   20                  25

<210> 124  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

<400> 124  
 Ala Gly Asp Gly Thr Phe Thr Ser Glu Leu Ser Lys Gln Leu Glu Glu  
   1                  5                  10                  15  
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Xaa  
                   20                  25

<210> 125  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

<400> 125  
 Ala Gly Asp Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Met Glu Glu  
   1                  5                  10                  15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Xaa  
                   20                  25

<210> 126  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist



<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 126  
Ala Gly Asp Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Xaa  
20 25

<210> 127  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> VARIANT  
<222> (10)  
<223> Xaa stands for Pentylgly

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 127  
Ala Gly Asp Gly Thr Phe Thr Ser Asp Xaa Ser Lys Gln Met Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Xaa  
20 25

<210> 128  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> VARIANT  
<222> (10)  
<223> Xaa stands for Pentylgly

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 128

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Xaa	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Xaa				
			20					25							

<210> 129  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ala	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Xaa				
			20					25							

<210> 130  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ala	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Xaa				
			20					25							

<210> 131  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (28)

<223> Xaa stands for Asparagine

<400> 131

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Ala	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Xaa				
			20					25							

<210> 132

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (28)

<223> Xaa stands for Asparagine

<400> 132

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Ala	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Xaa				
			20					25							

<210> 133

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (28)

<223> Xaa stands for Asparagine

<400> 133

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Ala	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Xaa				
			20					25							

<210> 134

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

<400> 134  
 Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Ala Leu Glu Glu  
 1 5 10 15  
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Xaa  
 20 25

<210> 135  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

<400> 135  
 Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Ala Glu Glu  
 1 5 10 15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Xaa  
 20 25

<210> 136  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

<400> 136  
 Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Ala Glu Glu  
 1 5 10 15  
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Xaa  
 20 25

<210> 137  
 <211> 28  
 <212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> VARIANT

<222> (14)

<223> Xaa stands for Pentylgly

<220>

<221> AMIDATION

<222> (28)

<223> Xaa stands for Asparagine

<400> 137

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Xaa	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Xaa				
			20					25							

<210> 138

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> VARIANT

<222> (14)

<223> Xaa stands for Pentylgly

<220>

<221> AMIDATION

<222> (28)

<223> Xaa stands for Asparagine

<400> 138

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Xaa	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Xaa				
			20					25							

<210> 139

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> VARIANT

<222> 28  
<223> Xaa stands for Asparagine

<400> 139  
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Ala Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Xaa  
20 25

<210> 140  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 140  
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Ala Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Xaa  
20 25

<210> 141  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 141  
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Ala  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Xaa  
20 25

<210> 142  
<211> 28  
<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (28)

<223> Xaa stands for Asparagine

<400> 142

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Ala
1				5				10					15		
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Xaa				
		20					25								

<210> 143

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (28)

<223> Xaa stands for Asparagine

<400> 143

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5				10					15		
Ala	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Xaa				
		20					25								

<210> 144

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (28)

<223> Xaa stands for Asparagine

<400> 144

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10					15		

Ala Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Xaa  
20 25

<210> 145  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 145  
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15  
Glu Ala Ala Arg Leu Phe Ile Glu Trp Leu Lys Xaa  
20 25

<210> 146  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 146  
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Ala Arg Leu Phe Ile Glu Phe Leu Lys Xaa  
20 25

<210> 147  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)



<223> Xaa stands for Asparagine

<400> 147

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5				10						15	
Glu	Ala	Val	Ala	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Xaa				
			20				25								

<210> 148

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (28)

<223> Xaa stands for Asparagine

<400> 148

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10						15	
Glu	Ala	Val	Ala	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Xaa				
			20				25								

<210> 149

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (28)

<223> Xaa stands for Asparagine

<400> 149

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5				10						15	
Glu	Ala	Val	Arg	Ala	Phe	Ile	Glu	Trp	Leu	Lys	Xaa				
			20				25								

<210> 150

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

<400> 150  
 Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
 1 5 10 15  
 Glu Ala Val Arg Ala Phe Ile Glu Phe Leu Lys Xaa  
 20 25

<210> 151  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> VARIANT  
 <222> (22)  
 <223> Xaa stands for Naphthylala

<220>  
 <221> AMIDATION  
 <222> (28)  
 <223> Xaa stands for Asparagine

<400> 151  
 Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
 1 5 10 15  
 Glu Ala Val Arg Leu Xaa Ile Glu Trp Leu Lys Xaa  
 20 25

<210> 152  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> VARIANT  
 <222> (22)  
 <223> Xaa stands for Naphthylala

<220>  
 <221> AMIDATION  
 <222> (28)

<223> Xaa stands for Asparagine

<400> 152

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Xaa	Ile	Glu	Phe	Leu	Lys	Xaa				
			20					25							

<210> 153

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (28)

<223> Xaa stands for Asparagine

<400> 153

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Val	Glu	Trp	Leu	Lys	Xaa				
			20					25							

<210> 154

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (28)

<223> Xaa stands for Asparagine

<400> 154

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Val	Glu	Phe	Leu	Lys	Xaa				
			20					25							

<210> 155

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> VARIANT  
<222> (23)  
<223> Xaa stands for tButylgly

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 155  
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Xaa Glu Trp Leu Lys Xaa  
20 25

<210> 156  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> VARIANT  
<222> (23)  
<223> Xaa stands for tButylgly

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 156  
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Xaa Glu Phe Leu Lys Xaa  
20 25

<210> 157  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 157  
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Asp Trp Leu Lys Xaa  
20 25

<210> 158  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 158  
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Asp Phe Leu Lys Xaa  
20 25

<210> 159  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 159  
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Ala Leu Lys Xaa  
20 25

<210> 160  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)

<223> Xaa stands for Asparagine

<400> 160

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Ala	Leu	Lys	Xaa				
			20					25							

<210> 161

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (28)

<223> Xaa stands for Asparagine

<400> 161

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Ala	Lys	Xaa				
			20					25							

<210> 162

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (28)

<223> Xaa stands for Asparagine

<400> 162

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Ala	Lys	Xaa				
			20					25							

<210> 163

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 163  
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Ala Xaa  
20 25

<210> 164  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Asparagine

<400> 164  
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Ala Xaa  
20 25

<210> 165  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (28)  
<223> Xaa stands for Alanine

<400> 165  
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Xaa  
20 25

<210> 166  
<211> 28  
<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (28)

<223> Xaa stands for Alanine

<400> 166

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10						15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Xaa				
			20					25							

<210> 167

<211> 38

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (38)

<223> Xaa stands for Proline

<400> 167

Ala	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5				10						15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		
Ser	Gly	Ala	Pro	Pro	Xaa										
			35												

<210> 168

<211> 38

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (38)

<223> Xaa stands for Proline

<400> 168

His	Gly	Ala	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10						15	



Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser  
                   20                  25                  30  
 Ser Gly Ala Pro Pro Xaa  
                   35

<210> 169  
 <211> 37  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (37)  
 <223> Xaa stands for Proline

<400> 169  
 His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
   1                  5                  10                  15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
                   20                  25                  30  
 Ser Gly Ala Pro Xaa  
                   35

<210> 170  
 <211> 36  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (36)  
 <223> Xaa stands for Proline

<400> 170  
 His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu  
   1                  5                  10                  15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
                   20                  25                  30  
 Ser Gly Ala Xaa  
                   35

<210> 171  
 <211> 36  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>

<221> AMIDATION

<222> (36)

<223> Xaa stands for Proline

<400> 171

Ala Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser  
20 25 30  
Ser Gly Ala Xaa  
35

<210> 172

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (35)

<223> Xaa stands for Alanine

<400> 172

Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
20 25 30  
Ser Gly Xaa  
35

<210> 173

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (35)

<223> Xaa stands for Alanine

<400> 173

His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser  
                   20                  25                  30  
 Ser Gly Xaa  
                   35

<210> 174  
 <211> 34  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (34)  
 <223> Xaa stands for Glycine

<400> 174  
 His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
   1                  5                  10                  15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
                   20                  25                  30  
 Ser Xaa

<210> 175  
 <211> 33  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (33)  
 <223> Xaa stands for Serine

<400> 175  
 His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu  
   1                  5                  10                  15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
                   20                  25                  30  
 Xaa

<210> 176  
 <211> 32  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (32)  
<223> Xaa stands for Serine

<400> 176  
Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Xaa  
20 25 30

<210> 177  
<211> 32  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (32)  
<223> Xaa stands for Serine

<400> 177  
His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Xaa  
20 25 30

<210> 178  
<211> 31  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exendin Agonist

<220>  
<221> AMIDATION  
<222> (31)  
<223> Xaa stands for Proline

<400> 178  
His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa  
20 25 30

<210> 179  
<211> 30  
<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (30)

<223> Xaa stands for Glycine

<400> 179

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Ala	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Xaa		
			20					25					30		

<210> 180

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (29)

<223> Xaa stands for Glycine

<400> 180

Ala	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Xaa			
			20					25							

<210> 181

<211> 38

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> VARIANT

<222> (31, 36 and 37)

<223> Xaa stands for tPro

<220>

<221> AMIDATION

<222> (38)

<223> Xaa stands for tPro

<400> 181

His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu

1	5	10	15												
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Xaa	Ser
	20			25								30			
Ser	Gly	Ala	Xaa	Xaa	Xaa										
	35														

<210> 182  
 <211> 38  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> VARIANT  
 <222> (36 and 37)  
 <223> Xaa stands for tPro

<220>  
 <221> AMIDATION  
 <222> (38)  
 <223> Xaa stands for tPro

<400> 182
His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30
Ser Gly Ala Xaa Xaa Xaa
35

<210> 183  
 <211> 37  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> VARIANT  
 <222> (31 and 36)  
 <223> Xaa stands for NMeala

<220>  
 <221> AMIDATION  
 <222> (37)  
 <223> Xaa stands for NMeala

<400> 183
His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser  
                   20                                  25                                  30  
 Ser Gly Ala Xaa Xaa  
                   35

<210> 184  
 <211> 36  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> VARIANT  
 <222> (31)  
 <223> Xaa stands for hPro

<220>  
 <221> AMIDATION  
 <222> (36)  
 <223> Xaa stands for hPro

<400> 184  
 Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
   1                                  5                                  10                                  15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser  
                   20                                  25                                  30  
 Ser Gly Ala Xaa  
                   35

<210> 185  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Exendin Agonist

<220>  
 <221> AMIDATION  
 <222> (35)  
 <223> Xaa stands for Alanine

<400> 185  
 His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
   1                                  5                                  10                                  15  
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
                   20                                  25                                  30  
 Ser Gly Xaa  
                   35

<210> 186  
 <211> 30  
 <212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (30)

<223> Xaa stands for Glycine

<400> 186

His	Gly	Asp	Ala	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Xaa		
			20					25					30		

<210> 187

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (39)

<223> Xaa stands for Serine

<400> 187

Ala	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		
Ser	Gly	Ala	Pro	Pro	Pro	Xaa									
			35												

<210> 188

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Exendin Agonist

<220>

<221> AMIDATION

<222> (39)

<223> Xaa stands for Serine

<400> 188

Ala	Gly	Ala	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	



Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser  
                   20                  25                  30  
 Ser Gly Ala Pro Pro Pro Xaa  
                   35

<210> 189  
 <211> 10  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificial sequence with specific variable  
       residues

<220>  
 <221> MOD\_RES  
 <222> 1  
 <223> Amidation, Gly at position 1 is optionally  
       amidated in the case that residues in positions  
       2...10 are absent.

<220>  
 <221> MOD\_RES  
 <222> 2  
 <223> Amidation, Gly at position 2 is is optional and  
       optionally amidated in the case that residues in  
       positions 3...10 are absent.

<220>  
 <221> UNSURE  
 <222> 3  
 <223> Xaa is selected from Pro, homoproline, 3Hyp, 4Hyp,  
       thioprolin, N-Alkylglycine, N-alkylpentylglycine,  
       or N-alklalanine and is optionally amidated in the  
       case that residues in positions 4...10 are absent

<220>  
 <221> MOD\_RES  
 <222> 4  
 <223> Amidation, Ser at position 4 is optionally  
       amidated in the case that residues in positions  
       5...10 are absent

<220>  
 <221> MOD\_RES  
 <222> 5  
 <223> Amidation, Ser at position 5 is optionally  
       amidated in the case that residues in positions  
       6...10 are absent

<220>  
 <221> MOD\_RES  
 <222> 6  
 <223> Amidation, Gly at position 6 is optionally  
       amidated in the case that residues in position  
       7...10 are absent

<220>  
 <221> MOD\_RES  
 <222> 7  
 <223> Amidation, Ala at position 7 is optionally  
 amidated in the case that residues in positions  
 8...10 are absent

<220>  
 <221> UNSURE  
 <222> 8  
 <223> Xaa is selected from Pro, homoproline, 3Hyp, 4Hyp,  
 thioproline, N-alkylglycine, N-alkylpentylglycine,  
 or N-alkylalanine and is optionally amidated in  
 the case that residues in positions 9...10 are  
 absent

<220>  
 <221> UNSURE  
 <222> 9  
 <223> Xaa is selected from Pro, homoproline, 3Hyp, 4Hyp,  
 thioproline, N-alkylglycine, N-alkylpentylglycine,  
 or N-alkylalanine and is optionally amidated in  
 the case that residues in position 10 are absent

<220>  
 <221> UNSURE  
 <222> 10  
 <223> Xaa is selected from Pro, homoproline, 3Hyp, 4Hyp,  
 thioproline, N-alkylglycine, N-alkylpentylglycine,  
 or N-alkylalanine and is optionally amidated

<400> 189  
 Gly Gly Xaa Ser Ser Gly Ala Xaa Xaa Xaa  
 1 5 10

<210> 190  
 <211> 11  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificial sequence with specific variable  
 residues

<220>  
 <221> MOD\_RES  
 <222> 1  
 <223> Amidation, Gly at position 1 is optionally  
 amidated in the case that residues in positions  
 2...11 are absent.

<220>  
 <221> MOD\_RES  
 <222> 2

<223> Amidation, Gly at position 2 is optional and optionally amidated in the case that residues in positions 3...11 are absent.

<220>  
 <221> UNSURE  
 <222> 3  
 <223> Xaa is selected from Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-Alkylglycine, N-alkylpentylglycine, or N-alkylalanine and is optionally amidated in the case that residues in positions 4...11 are absent

<220>  
 <221> MOD\_RES  
 <222> 4  
 <223> Amidation, Ser at position 4 is optionally amidated in the case that residues in positions 5...11 are absent

<220>  
 <221> MOD\_RES  
 <222> 5  
 <223> Amidation, Ser at position 5 is optionally amidated in the case that residues in positions 6...11 are absent

<220>  
 <221> MOD\_RES  
 <222> 6  
 <223> Amidation, Gly at position 6 is optionally amidated in the case that residues in position 7...11 are absent

<220>  
 <221> MOD\_RES  
 <222> 7  
 <223> Amidation, Ala at position 7 is optionally amidated in the case that residues in positions 8...11 are absent

<220>  
 <221> UNSURE  
 <222> 8  
 <223> Xaa is selected from Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine, N-alkylpentylglycine, or N-alkylalanine and is optionally amidated in the case that residues in positions 9...11 are absent

<220>  
 <221> UNSURE  
 <222> 9  
 <223> Xaa is selected from Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine, N-alkylpentylglycine, or N-alkylalanine and is optionally amidated in the case that residues in position 10...11 are absent

<220>  
<221> UNSURE  
<222> 10  
<223> Xaa is selected from Pro, homoproline, 3Hyp, 4Hyp,  
thioprolin, N-alkylglycine, N-alkylpentylglycine,  
or N-alkylalanine and is optionally amidated in  
the case that residues in position 11 are absent

<220>  
<221> UNSURE  
<222> 11  
<223> Xaa is Ala, which is optionally amidated

<400> 190  
Gly Gly Xaa Ser Ser Gly Ala Xaa Xaa Xaa Xaa  
1 5 10